

# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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### Title V Operating Permit

**PERMIT NUMBER: 4500005001**

**DATE OF PERMIT: March 5, 2001**

Date of Last Revision: September 19, 2001

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This Operating Permit is issued to, and applies to the following:

**Name of Permittee:**

Chemical Lime Company  
PO Box 537  
Grantsville, UT 84029

**Permitted Location:**

Grantsville Plant  
PO Box 537  
Grantsville, UT 84029

**UTM coordinates:** 4,504,800 meters Northing, 369,000 meters Easting  
**SIC code:** 3274

#### ABSTRACT

Chemical Lime Company operates the Grantsville plant in Tooele County, Utah. This facility has been in operation since 1960. The Grantsville facility consists of the Grantsville Quarry and the Grantsville plant, including mining activities, limestone processing, one rotary lime kiln, post-kiln lime handling, a quicklime hydrator and associated equipment, bagging facilities, and truck and rail loadout facilities. The rotary kilns are used to convert crushed limestone ore into quicklime. The products produced are quicklime, hydrate, aggregate kiln-grade limestone, overburden/low-grade limestone, chat, and wires and char from tires. The major sources of air emissions are mining and material handling, the combustion of fuels for the kiln operation, and the kiln and cooling process. The Grantsville facility is a major source for emissions of PM<sub>10</sub>, NO<sub>x</sub>, and CO.

#### UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

James Chapman, Environmental Engineer

### Operating Permit History

3/5/2001 - Permit issued	Action initiated by an initial operating permit application	
9/19/2001 -Permit modified	Action initiated by an administrative amendment (initiated by source)	for addition of a second bagging line.

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**Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.**

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

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## **Section I: GENERAL PROVISIONS**

### **I.A. Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

### **I.B. Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

### **I.C. Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

**I.D. Permit Expiration and Renewal.**

I.D.1 **This permit is issued for a fixed term of five years and expires on March 5, 2006.**  
(R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by September 5, 2005. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

**I.E. Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

**I.F. Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

**I.G. Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

**I.H. No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege.  
(R307-415-6a(6)(d))

**I.I. Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

**I.J. Inspection and Entry.**

**I.J.1** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

**I.J.1.a** Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit.  
(R307-415-6c(2)(a))

**I.J.1.b** Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

**I.J.1.c** Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit.  
(R307-415-6c(2)(c))

**I.J.1.d** Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

**I.J.2** Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

**I.K. Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

**I.L. Compliance Certification.**

**I.L.1** Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than March 5, 2002 and

that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
EPA, Region VIII  
999 18th Street, Suite 300  
Denver, CO 80202-2466

**I.M. Permit Shield.**

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
  - I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
  - I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:

- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))
- I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))
- I.N. **Emergency Provision.**
- I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))



**I.O. Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

**I.P. Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

**I.Q. Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

**I.R. Permit Modifications.**

Permit modifications are governed by R307-415-7f.

**I.S. Records and Reporting.**

**I.S.1 Records.**

**I.S.1.a** The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.  
(R307-415-6a(3)(b)(ii))

**I.S.1.b** For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

**I.S.1.b.1** The date, place as defined in this permit, and time of sampling or measurement.

**I.S.1.b.2** The date analyses were performed.

**I.S.1.b.3** The company or entity that performed the analyses.

**I.S.1.b.4** The analytical techniques or methods used.

**I.S.1.b.5** The results of such analyses.

**I.S.1.b.6** The operating conditions as existing at the time of sampling or measurement.

**I.S.1.c** Additional record keeping requirements, if any, are described in Section II, Special Provisions.

**I.S.2 Reports.**

- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality  
P.O. Box 144820  
Salt Lake City, UT 84114-4820  
Phone: 801-536-4000

- I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and  
Environmental Justice (mail code 8ENF)  
999 18th Street, Suite 300  
Denver, CO 80202-2466

For reports, notifications, or other  
correspondence related to permit modifications,  
applications, etc.

Environmental Protection Agency, Region VIII  
Office of Partnerships & Regulatory Assistance  
Air & Radiation Program (mail code 8P-AR)  
999 18th Street, Suite 300  
Denver, CO 80202-2466  
Phone: 303-312-6440

I.T. **Reopening for Cause.**

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:
- I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and

conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

- I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))
- I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))
- I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))
- I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))
- I.U. **Inventory Requirements.**
- I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)
- I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

## **Section II: SPECIAL PROVISIONS**

### **II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.**

(R307-415-4(3)(a) and R307-415-4(4))

#### **II.A.1 Limestone Quarry** (designated as LQ)

Unit Description: All mining activities, including drilling & blasting, not otherwise specified. No unit-specific applicable requirements.

#### **II.A.2 Haul Road Traffic** (designated as 40-HRT)

Unit Description: Fugitive emissions from unpaved haulage road traffic. (Opacity survey to be completed from observation point C for this unit).

#### **II.A.3 Unpaved Roads & Unpaved Operational Areas (Pre)** (designated as 40-UROA)

Unit Description: Fugitive emissions from unpaved roads and other unpaved operational areas and all disturbed surfaces or stripped areas constructed prior to April 25, 1971.

#### **II.A.4 Unpaved Roads & Unpaved Operational Areas (Post)** (designated as 20-UROA)

Unit Description: Fugitive emissions from unpaved roads and other unpaved operational areas and all disturbed surfaces or stripped areas constructed after April 25, 1971.

#### **II.A.5 Haul Roads and Unpaved Roads & Areas** (designated as Opacity-Fugitive Dust)

Unit Description: Includes 40-HRT, 40-UROA, and 20 UROA

#### **II.A.6 Primary Crusher** (designated as 40-1, CP-Jcrush)

Unit Description: Pre November 29, 1969 Jaw Crusher rated at approximately 200 tph. (Opacity survey to be completed from observation point A for this unit).

#### **II.A.7 Vibrating Screen** (designated as 40-2, CP-Screen)

Unit Description: Pre November 29, 1969 vibrating screen rated at approximately 300 tph. (Opacity survey to be completed from observation point A for this unit).

#### **II.A.8 Secondary Cone Crusher** (designated as 40-3, CP-Gcrush)

Unit Description: Pre November 29, 1969 gyratory cone crusher rated at approximately 125 tph. (Opacity survey to be completed from observation point A for this unit).

#### **II.A.9 Conveyor Drop Point 1** (designated as 40-4, CP-Belt1 to CP-PriPile)

Unit Description: Material drop point from Belt 1 to primary storage pile. (Opacity survey to be completed from observation point A for this unit).

#### **II.A.10 Conveyor Drop Point 2** (designated as 40-5, CP-Belt4 to CP-KilnPile)

Unit Description: Material drop point from Belt 4 to kiln storage pile. (Opacity survey to be completed from observation point A for this unit).

#### **II.A.11 Limestone Handling Equipment and Stockpiles** (designated as LSHE)

Unit Description: Pre November 29, 1969, limestone handling equipment, including feed hopper, temporary feed hopper and tube screw, all equipment drops to stockpiles, and all stockpiles. No unit-specific applicable requirements.

#### **II.A.12 Lime and Quicklime Hydrate Handling Equipment** (designated as LHHE)

Unit Description: Pre Nov. 29, 1969, lime and hydrate handling equipment, including screw conveyors, bucket elevators, universal crusher, pugmill, dribble tubes, portable and reclaim hoppers, gravity chutes, hammermill, mixers, pumps, and collector. No unit-specific applicable requirements.

#### **II.A.13 Limestone and Lime Screening** (designated as LS)

Unit Description: Pre November 29, 1969, all screens, other than 4x8 vibrating screen (K-SCREEN), that handle limestone and lime. No unit-specific applicable requirements.

- II.A.14      **Bins** (designated as BINS)  
Unit Description: Pre November 29, 1969, product storage bins (FL-2Bin to FL-10Bin), dust bin (K-DBin1), chat bin (CP-Cbin), stone bin (K-Sbin), waste bin (FL-Wbin), surge bin (H-Sbin), and out-of-spec bin. No unit-specific applicable requirements.
- II.A.15      **500 Ton Storage Bin** (designated as 10-1, FL1Bin)  
Unit Description: 500 ton storage bin controlled by baghouse (DC-1QS). (Opacity survey to be completed from observation point B for this unit).
- II.A.16      **120 ton Storage Silo** (designated as 10-4, H-3Silo)  
Unit Description: 120 Ton storage silo for second bagger line.
- II.A.17      **25 Ton Storage Bin** (designated as 10-2, K-DBin2)  
Unit Description: 25 ton dust storage bin controlled by baghouse (DC-8KD). (Opacity survey to be completed from observation point B for this unit).
- II.A.18      **2 Ton Storage Bin** (designated as Sbin)  
Unit Description: 2 ton dust storage bin (2 ton dust bin has not been installed to date).
- II.A.19      **Pneumatic Dust Transfer System** (designated as 10-3, K-PnTrn)  
Unit Description: Pneumatic dust transfer system located between dust bins (K-DBin1 & K-DBin2) controlled by a baghouse (DC-6KD). (Opacity survey to be completed from observation point B for this unit).
- II.A.20      **Rotary Kiln** (designated as 20-1, DS1RK)  
Unit Description: Rotary kiln with electroscrubber (DS-1RK), cyclone, gravel bed, and electro grid. The kiln may be fired on natural gas, fuel oil, plant used oil, or tire derived fuel (TDF) only. (Opacity survey to be completed from observation point A for this unit).
- II.A.21      **Vibrating Screen** (designated as 20-2, K-Screen)  
Unit Description: 4x8 vibrating screen within rotary kiln system. (Opacity survey to be completed from observation point A for this unit).
- II.A.22      **Hydrator** (designated as 20-3, HBH-1HY)  
Unit Description: Pressure hydrator with emissions controlled by a baghouse (HBH-1HY). (Opacity survey to be completed from observation point A for this unit).
- II.A.23      **Baghouse #1** (designated as 20-4, DC-1QS)  
Unit Description: Baghouse controlling emissions from front lime handling system product bins (FL-1Bin, FL-9Bin, & FL-10Bin), and universal crusher (FL-Ucrush). (Opacity survey to be completed from observation point A for this unit).
- II.A.24      **Baghouse #2** (designated as 20-5, DC-2QP)  
Unit Description: Baghouse controlling emissions from front lime handling system bins (FL-2Bin, FL-3Bin, FL-4Bin, & FL-8Bin), screens, and belt conveyors; back lime handling system product bin (FL-5Bin); and hydrate system surge bin (H-Sbin). (Observation point A).
- II.A.25      **Baghouse #3** (designated as 20-6, DC-3HB)  
Unit Description: Baghouse controlling emissions from hydrate system screw conveyors, bucket elevators, separators (H-1Sprtr & H-2Sprtr), and hydrate bagger. (Opacity survey to be completed from observation point A for this unit).
- II.A.26      **Baghouse #4** (designated as 20-7, DC-4LO)  
Unit Description: Baghouse controlling emissions from back lime handling system loadout rotary screen, rail loadout & screw conveyor, and hydrate system bulk loadout. (Opacity survey to be completed from observation point B for this unit).

- II.A.27      **Baghouse #5** (designated as 20-8, DC-5LO)  
Unit Description: Baghouse controlling emissions from back lime handling system transfer point to belt conveyor, and hydrate system bulk loadout screw conveyor. (Opacity survey to be completed from observation point B for this unit).
- II.A.28      **Conveyor Transfer Point 9** (designated as 20-9, CTP-CPBelt1)  
Unit Description: Conveyor transfer point to CP-Belt1. (Opacity survey to be completed from observation point A for this unit).
- II.A.29      **Conveyor Transfer Point 10** (designated as 20-10, CTP-CPBelt2)  
Unit Description: Conveyor transfer point to CP-Belt2. (Opacity survey to be completed from observation point A for this unit).
- II.A.30      **Conveyor Transfer Point 11** (designated as 20-11, CTP-CPBelt2)  
Unit Description: Conveyor transfer point from CP-Belt2. (Opacity survey to be completed from observation point A for this unit).
- II.A.31      **Conveyor Transfer Point 12** (designated as 20-12, CTP-CPBelt4)  
Unit Description: Conveyor transfer point to CP-Belt4. (Opacity survey to be completed from observation point A for this unit).
- II.A.32      **Conveyor Transfer Point 13** (designated as 20-13 CTP-CPBelt5)  
Unit Description: Conveyor transfer point to CP-Belt5. (Opacity survey to be completed from observation point A for this unit).
- II.A.33      **Conveyor Transfer Point 14** (designated as 20-14CTP-CPBelt5)  
Unit Description: Conveyor transfer point from CP-Belt5. (Opacity survey to be completed from observation point A for this unit).
- II.A.34      **Conveyor Transfer Point 15** (designated as 20-15, CTP-CPBelt3)  
Unit Description: Conveyor transfer point to CP-Belt3. (Opacity survey to be completed from observation point A for this unit).
- II.A.35      **Conveyor Transfer Point 16** (designated as 20-16, CTP-CPBelt3)  
Unit Description: Conveyor transfer point from CP-Belt3. (Opacity survey to be completed from observation point A for this unit).
- II.A.36      **Conveyor Transfer Point 17** (designated as 20-17, CTP-Kbelt)  
Unit Description: Conveyor transfer point to K-Belt. This unit is not included in opacity surveys due to its location being underground. No unit-specific applicable requirements.
- II.A.37      **Conveyor Transfer Point 18** (designated as 20-18, CTP-Kbelt)  
Unit Description: Conveyor transfer points from K-Belt, includes two transfer points. (Opacity survey to be completed from observation point A for this unit).
- II.A.38      **Conveyor Transfer Point 19** (designated as 20-19, CTP-FLBelt1)  
Unit Description: Conveyor transfer points to FL-Belt1, includes three transfer points. (Opacity survey to be completed from observation point A for this unit).
- II.A.39      **Conveyor Transfer Point 20** (designated as 20-20, CTP-FLBelt1)  
Unit Description: Conveyor transfer point from FL-Belt1. (Opacity survey to be completed from observation point A for this unit).
- II.A.40      **Conveyor Transfer Point 21** (designated as 20-21, CTP-FLBelt2)  
Unit Description: Conveyor transfer point to FL-Belt2. (Opacity survey to be completed from observation point A for this unit).
- II.A.41      **Conveyor Transfer Point 22** (designated as 20-22, CTP-FLBelt2)  
Unit Description: Conveyor transfer points from FL-Belt2, includes two transfer points. (Opacity survey to be completed from observation point A for this unit).

- II.A.42      **Conveyor Transfer Point 23** (designated as 20-23, CTP-BLBelt)  
Unit Description: Conveyor transfer points to BL-Belt, includes eight transfer points. (Opacity survey to be completed from observation point B for this unit).
- II.A.43      **Conveyor Transfer Point 24** (designated as 20-24, CTP-BLBelt)  
Unit Description: Conveyor transfer points from BL-Belt, includes two transfer points. (Opacity survey to be completed from observation point B for this unit).
- II.A.44      **Conveyor Transfer Point 25** (designated as 20-25, CTP-HBelt1)  
Unit Description: Conveyor transfer points to H-Belt1. This unit is not included in the opacity surveys due to its location being inside of a building. No unit-specific applicable requirements.
- II.A.45      **Conveyor Transfer Point 26** (designated as 20-26, CTP-HBelt1)  
Unit Description: Conveyor transfer points from H-Belt1. This unit is not included in the opacity surveys due to its location being inside of a building. No unit-specific applicable requirements.
- II.A.46      **Conveyor Transfer Point 27** (designated as 20-27, CTP-HBelt2)  
Unit Description: Conveyor transfer points to H-Belt2. This unit is not included in the opacity surveys due to its location being inside of a building. No unit-specific applicable requirements.
- II.A.47      **Conveyor Transfer Point 28** (designated as 20-28, CTP-HBelt2)  
Unit Description: Conveyor transfer points from H-Belt2. This unit is not included in the opacity surveys due to its location being inside of a building. No unit-specific applicable requirements.
- II.A.48      **Conveyor Transfer Point 29** (designated as 20-29, CTP-Bagger)  
Unit Description: Conveyor transfer point to belt conveyor from bagger. This unit is not included in the opacity surveys due to it only carries bagged material. No unit-specific applicable requirements.
- II.A.49      **Conveyor Transfer Point 30** (designated as 20-30, CTP-Palletizer)  
Unit Description: Conveyor transfer point from belt conveyor to palletizer. This unit is not included in the opacity surveys due to its location being inside of a building. No unit-specific applicable requirements.
- II.A.50      **10 Percent Opacity Units** (designated as Opacity-10)  
Unit Description: Includes units 10-1 through 10-5
- II.A.51      **20 Percent Opacity Units** (designated as Opacity-20)  
Unit Description: Includes units 20-1 through 20-30, and 20-Other.
- II.A.52      **40 Percent Opacity Units** (designated as Opacity-40)  
Unit Description: Includes 40-1, 40-2, 40-3, 40-4, and 40-5.
- II.A.53      **Emission Units Not Otherwise Assigned** (designated as 20-Other)  
Unit Description: All other emission units not otherwise assigned. (Opacity survey to be completed from observation point A for this unit).
- II.A.54      **Petroleum Storage Tanks** (designated as TANKS)  
Unit Description: 42,000 gal. fuel oil (1965), 9,000 gal. fuel oil, 1000 gal. Gasoline, 250 gal. diesel fuel, and 10,000 gal. diesel fuel. All tanks listed for informational purposes only. Not subject to NSPS Kb by date or size. No unit-specific applicable requirements.
- II.A.55      **Baghouse #7** (designated as DC-7SC)  
Unit Description: Baghouse that was installed but has never been operated. Listed for informational purposes only.

- II.A.56      **Baghouse #9** (designated as DC-9HY)  
                  Unit Description: Baghouse used to blow clean air into the kiln. Listed for informational purposes only.
- II.A.57      **Baghouse #10** (designated as 10-5, DC-10FF)  
                  Unit Description: Baghouse controlling emissions from second bagging line, including a bagger (Bagger-2), 120 ton silo (H-3Silo), belt conveyor (H-Belt3) and a screw conveyor (H-Screw22). (Visible Emissions observations shall be taken from observation position A)
- II.A.58      **Miscellaneous Emissions** (designated as MISC)  
                  Unit Description: Emission sources with no unit-specific requirements such as painting, laboratory, acetylene combustion, parts cleaners, comfort heaters, sandblasting, portable compression emergency backup pony motor, and trash pump. No unit-specific applicable requirements.

**II.B.      Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

**II.B.1      Conditions on permitted source (Source-wide):**

- II.B.1.a      At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5; condition originated in DAQE-574-01]
- II.B.1.a.1      **Monitoring:**      Records required for this permit condition will serve as monitoring.
- II.B.1.a.2      **Recordkeeping:**      Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.a.3      **Reporting:**      There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.b      The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in R307-305-1]
- II.B.1.b.1      **Monitoring:**      The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.
- II.B.1.b.2      **Recordkeeping:**      All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.
- II.B.1.b.3      **Reporting:**      All reports required in 40 CFR 82, Subpart F shall be submitted as required.



There are no additional reporting requirements except as outlined in Section I of this permit.

- II.B.1.c The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in R307-305-1]
- II.B.1.c.1 **Monitoring:** The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.
- II.B.1.c.2 **Recordkeeping:** All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.
- II.B.1.c.3 **Reporting:** All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.
- II.B.1.d Sulfur content of any fuel oil or diesel burned shall be no greater than 0.85 lbs/MMBtu heat input. [Authority granted under R307-203-1; condition originated in DAQE-574-01]
- II.B.1.d.1 **Monitoring:** The following specifications shall be recorded for each purchase of fuel: weight percent sulfur, gross heating value (Btu per unit volume), and density. All specifications shall be ascertained in accordance with methods of American Society for Testing and Materials.
- Sulfur content in lbs/MMBtu shall be determined by the following equation:  
$$S \text{ lbs/MMBtu} = [(\text{Weight percent sulfur}/100) \times \text{Density (lb/gal)}] / [(\text{gross heating value (Btu/gal)}) \times (1 \text{ MMBtu}/1,000,000 \text{ Btu})]$$
- The permittee may obtain the above specifications by testing each purchase of fuel in accordance with the required methods; by inspection of the specifications provided by the vendor for each purchase of fuel; or by inspection of summary documentation of the fuel sulfur content from the vendor, provided that the above specifications are available from the vendor for each purchase if requested.
- II.B.1.d.2 **Recordkeeping:** Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.
- II.B.1.d.3 **Reporting:** There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.e Chemical Lime Company shall notify the Executive Secretary in writing when the installation of the 2nd bagging line and associated equipment has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from July 27, 2001, the Executive Secretary shall be notified in writing on the status of the construction and/or installation.

At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11, UAC.. [Authority granted under R307-401-11; condition originated in DAQE-574-01]

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| II.B.1.e.1 | <b>Monitoring:</b>    | Records required for this permit condition will serve as monitoring.   |
| II.B.1.e.2 | <b>Recordkeeping:</b> | As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.   |
| II.B.1.e.3 | <b>Reporting:</b>     | In addition to the reporting requirements specified in Section I of this permit, the permittee shall notify the Executive Secretary in writing eighteen months after the issuance date of the subject approval order if construction, installation, modification, relocation or establishment is not complete. The notification shall document the status of construction, installation, modification, relocation or establishment and provide a schedule for installation, modification, relocation or establishment. |

II.B.2      **Conditions on Haul Roads and Unpaved Roads & Areas (Opacity-Fugitive Dust):**

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| II.B.2.a   | Fugitive dust shall be minimized at all mining operations including but not limited to: site preparations, construction activities, mining activities, storage sites, roadways, and reclamation operations. Fugitive dust control measures to be used may include: periodic watering, chemical stabilization, paving, removal of spillage, surface compaction, speed restriction, revegetating, restricting travel, stabilizing loaded material, covering conveyor systems, minimizing disturbed areas, drill dust controls, restricting areas to be blasted at one time, restricting fugitive dust at transfer points, or enclosing/covering/stabilizing storage piles. [Authority granted under R307-205-5; condition originated in DAQE-574-01]   |  |
| II.B.2.a.1 | <b>Monitoring:</b>   | Records required for this permit condition will serve as monitoring.   |
| II.B.2.a.2 | <b>Recordkeeping:</b>  | Records of all fugitive dust control measures utilized shall be made on a basis appropriate to ensure fugitive dust was minimized  |
| II.B.2.a.3 | <b>Reporting:</b>  | There are no reporting requirements for this provision except those specified in Section I of this permit.   |
| II.B.2.b   | All unpaved roads, other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to minimize fugitive dust as necessary to meet opacity limitations. All disturbed surfaces or stripped areas shall be controlled by watering or other means until the areas develop surfaces that are not susceptible to wind erosion or are reclaimed. The opacity shall not exceed 20 percent for all areas constructed after April 25, 1971 and shall not exceed 40 percent for all areas constructed prior to April 25, 1971. The permittee is not required to apply water to surfaces during freezing conditions. If chemical treatment is to be used, the plan shall be pre-approved by the Executive Secretary. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01] |  |
| II.B.2.b.1 | <b>Monitoring:</b>   | In lieu of opacity monitoring, daily hours of operation of the water truck(s), and the days when chemical dust suppressants were applied to the areas shall be monitored. These records shall include the volume of water applied and location of applications, or the type of chemical dust |

suppressant applied and location of applications. The methods used to control disturbed or stripped areas shall be recorded as they occur, and include dates and times, the types of control used, volume, and locations.

- II.B.2.b.2                      **Recordkeeping:**      Records of all fugitive dust control measures utilized shall be made on a basis appropriate to ensure fugitive dust was minimized
- II.B.2.b.3                      **Reporting:**              There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.2.c                      Visible emissions shall be no greater than 40 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
- II.B.2.c.1                      **Monitoring:**              An opacity survey of haul road traffic and mobile equipment in operational areas shall be performed on a monthly basis in accordance with procedures similar to 40 CFR 60, Appendix A, Method 9. The opacity determination shall be performed as follows: The requirement for observations to be made at 15-second intervals over a six minute period shall not apply. Six points, distributed along the length of the haul road or in the operational area shall be chosen either by the permittee or by the executive secretary or his/her representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made one-half the vehicle length or greater behind the vehicle and at approximately one-half the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.
- II.B.2.c.2                      **Recordkeeping:**              Results from opacity observations (EPA Method 9) shall be recorded and maintained in accordance with Provision S.1 in Section I of this permit.
- II.B.2.c.3                      **Reporting:**                      There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.3                      **Conditions on Rotary Kiln (20-1, DS1RK):**
- II.B.3.a                      Emissions of TSP shall be no greater than 30.98 lbs/hour and no greater than 0.24 grain/dscf. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
- II.B.3.a.1                      **Monitoring:**                      Stack testing shall be performed as specified below:
- (a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. If no initial test has been performed, emissions shall be tested within one year of the issuance date of this permit. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) Sample Method - 40 CFR 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration.

(d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.a.2                      **Recordkeeping:** Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.3.a.3                      **Reporting:** The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b                      Emissions of PM<sub>10</sub> shall be no greater than 24.78 lbs/hour and no greater than 0.19 grain/dscf. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.3.b.1                      **Monitoring:** Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.b.2                      **Recordkeeping:** Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.3.b.3                      **Reporting:** The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.c                      Emissions of NO<sub>x</sub> shall be no greater than 75.00 lbs/hour and no greater than 650.00 ppm. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.3.c.1                      **Monitoring:** Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.

(3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.c.2	<b>Recordkeeping:</b>	Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.
II.B.3.c.3	<b>Reporting:</b>	The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.
II.B.3.d		Production of quicklime shall be no greater than 12.5 tons per hour annual average and no greater than 100,000 tons per rolling 12 month total. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
II.B.3.d.1	<b>Monitoring:</b>	For the annual production limit, within the first 25 days of each month, a 12-month rolling total shall be determined using records from the previous 12 months. For the hourly limitation, within the first 25 days of each month, the recorded production value shall be divided by the operating hours for the previous 12 months and compared to the limitation. The production and operating hours shall be recorded on a daily basis for all periods of operation.
II.B.3.d.2	<b>Recordkeeping:</b>	Records of production and operating hours shall be kept on a daily basis in accordance with Provision I.S.1 of this permit, for all periods of operation.
II.B.3.d.3	<b>Reporting:</b>	There are no reporting requirements for this provision except those specified in Section I of this permit.
II.B.3.e		The concentration of contaminants or parameters in any used oil fuel burned in the Kiln shall not exceed the following levels: Arsenic 5 ppm by weight, Cadmium 2 ppm by weight, Chromium 10 ppm by weight, Lead 100 ppm by weight, Total Halogens 1,000 ppm by weight, Sulfur 0.5 percent by weight, and Flash Point not less than 100 degrees F. Used oil exceeding any of the above contaminants shall not be burned until the permittee has submitted and received approval of a modeling analysis of the projected emissions for each contaminant, from the Executive Secretary. The modeling analysis shall show in each case that the resulting concentration of contaminant in the ambient air does not exceed the TLV/100 value for the given contaminant. Any used oil fuel that contains more than 1,000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the kiln. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.3.e.1	<b>Monitoring:</b>	The permittee shall maintain test certification data for each load of used oil fuel received. Certification shall be either by permittee testing or test reports provided by the used oil fuel vendor. The used oil fuel shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to a holding tank or burned.
II.B.3.e.2	<b>Recordkeeping:</b>	Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation.
II.B.3.e.3	<b>Reporting:</b>	There are no reporting requirements for this provision except those specified in Section I of this permit.
II.B.3.f	Used oil consumption shall be no greater than 1,500 gallons per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]	
II.B.3.f.1	<b>Monitoring:</b>	Compliance with the limitation shall be determined on a rolling 12-month total. The permittee shall calculate a new 12-month total by the 25th day of each month using data from the previous 12 months. Records shall be kept on a daily basis when in operation.
II.B.3.f.2	<b>Recordkeeping:</b>	Records of used oil combusted shall be kept daily for all periods when the plant is in operation.
II.B.3.f.3	<b>Reporting:</b>	There are no reporting requirements for this provision except those specified in Section I of this permit.
II.B.4	<b><u>Conditions on Hydrator (20-3, HBH-1HY):</u></b>	
II.B.4.a	Emissions of TSP shall be no greater than 1.65 lbs/hour and no greater than 0.075 grain/dscf. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]	
II.B.4.a.1	<b>Monitoring:</b>	<p>Stack testing shall be performed as specified below:</p> <p>(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. If no initial test has been performed, emissions shall be tested within one year of the issuance date of this permit. Tests may also be required at the direction of the Executive Secretary.</p> <p>(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.</p> <p>(c) Methods.</p> <p>(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.</p>

(2) Sample Method - 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration.

(d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.a.2                      **Recordkeeping:** Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.4.a.3                      **Reporting:** The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b                      Emissions of PM<sub>10</sub> shall be no greater than 1.32 lbs/hour and no greater than 0.060 grain/dscf.  
[Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.4.b.1                      **Monitoring:** Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested every three years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.

(3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back



half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.

(4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.b.2	<b>Recordkeeping:</b>	Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.
II.B.4.b.3	<b>Reporting:</b>	The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.
II.B.4.c		Production of hydrate shall be no greater than 126,000 tons per rolling 12 month total. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
II.B.4.c.1	<b>Monitoring:</b>	Within the first 25 days of each month, a 12-month rolling total shall be determined using records from the previous 12 months. Production shall be recorded on a daily basis for all periods of operation.
II.B.4.c.2	<b>Recordkeeping:</b>	Records of production shall be kept on a daily basis in accordance with Provision I.S.1 of this permit, for all periods of operation.
II.B.4.c.3	<b>Reporting:</b>	There are no reporting requirements for this provision except those specified in Section I of this permit.
II.B.4.d		Differential pressure across the fabric filter of the baghouse shall be maintained between 0.5 inches to 6.0 inches water gauge. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
II.B.4.d.1	<b>Monitoring:</b>	Baghouse pressure drop shall be monitored daily with a manometer or magnahelic pressure gauge when the baghouse is operating. If the pressure differential is outside the range, then the cause shall be investigated and corrective measures taken within two hours of discovering the exceedance, to restore the pressure differential to within the range. The pressure gage shall be located such that an inspector /operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 6.0% of the reading. The instrument shall be calibrated against a primary standard annually.

- II.B.4.d.2                      **Recordkeeping:**      Results of pressure drop readings shall be recorded and maintained as described in Provision S.1 in Section I of this permit. In addition, records shall be maintained of any excursions from the given range, the corrective action taken to restore the pressure differential to within the range, and the time intervals involved.
- II.B.4.d.3                      **Reporting:**              There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.5                      **Conditions on 10 Percent Opacity Units (Opacity-10):**
- II.B.5.a                      Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
- II.B.5.a.1                      **Monitoring:**              An opacity observation shall be conducted from each of the pre-determined observation locations (A, B, or C) on a monthly basis in accordance with 40 CFR 60, Appendix A, Method 9 on the emission unit of this defined group of units, that appears to have the highest opacity. If the highest unit does not exceed the opacity limitation, no further observations of any of the other emission units of this group will be required. If this unit exceeds the opacity limitation, the emission unit with the next highest opacity shall be observed until an emission unit of this group does not exceed the opacity limitation. All emission units not observed shall be considered to not exceed the opacity limitation.
- II.B.5.a.2                      **Recordkeeping:**              The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.5.a.3                      **Reporting:**              There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.6                      **Conditions on 20 Percent Opacity Units (Opacity-20):**
- II.B.6.a                      Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]
- II.B.6.a.1                      **Monitoring:**              An opacity observation shall be conducted from each of the pre-determined observation locations (A, B, or C) on a monthly basis in accordance with 40 CFR 60, Appendix A, Method 9 on the emission unit of this defined group of units, that appears to have the highest opacity. If the highest unit does not exceed the opacity limitation, no further observations of any of the other emission units of this group will be required. If this unit exceeds the opacity limitation, the emission unit with the next highest opacity shall be observed until an emission unit of this group does not exceed the opacity limitation. All emission units not observed shall be considered to not exceed the opacity limitation.
- II.B.6.a.2                      **Recordkeeping:**              The permittee shall record the date of each visual opacity survey and keep a

list of the emission points checked during the visual opacity survey. The permittee shall also keep a log of the following information for each observed visual emission: date and time visual emissions observed, emission point location and description, time and date of opacity test, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.a.3                      **Reporting:**                      There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7                      **Conditions on 40 Percent Opacity Units (Opacity-40):**

II.B.7.a                      Visible emissions shall be no greater than 40 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.7.a.1                      **Monitoring:**                      An opacity observation shall be conducted from each of the pre-determined observation locations (A, B, or C) on a monthly basis in accordance with 40 CFR 60, Appendix A, Method 9 on the emission unit of this defined group of units, that appears to have the highest opacity. If the highest unit does not exceed the opacity limitation, no further observations of any of the other emission units of this group will be required. If this unit exceeds the opacity limitation, the emission unit with the next highest opacity shall be observed until an emission unit of this group does not exceed the opacity limitation. All emission units not observed shall be considered to not exceed the opacity limitation.

II.B.7.a.2                      **Recordkeeping:**                      The permittee shall record the date of each visual opacity survey and keep a list of the emission points checked during the visual opacity survey. The permittee shall also keep a log of the following information for each observed visual emission: date and time visual emissions observed, emission point location and description, time and date of opacity test, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.7.a.3                      **Reporting:**                      There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8                      **Conditions on Baghouse #10 (10-5, DC-10FF):**

II.B.8.a                      Differential pressure across the fabric filter of the baghouse shall be maintained between 0.5 inches to 6.0 inches water gauge. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-574-01]

II.B.8.a.1                      **Monitoring:**                      Baghouse pressure drop shall be monitored daily with a manometer or magnahelic pressure gauge when the baghouse is operating. If the pressure differential is outside the range, then the cause shall be investigated and corrective measures taken within two hours of discovering the exceedance, to restore the pressure differential to within the range. The pressure gage shall be located such that an inspector /operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus

6.0% of the reading. The instrument shall be calibrated against a primary standard annually.

- II.B.8.a.2                      **Recordkeeping:**      Results of pressure drop readings shall be recorded and maintained as described in Provision S.1 in Section I of this permit. In addition, records shall be maintained of any excursions from the given range, the corrective action taken to restore the pressure differential to within the range, and the time intervals involved.
- II.B.8.a.3                      **Reporting:**              There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.C.                      **Emissions Trading.** (R307-415-6a(10))  
Not applicable to this source.
- II.D.                      **Alternative Operating Scenarios.** (R307-415-6a(9))  
Not applicable to this source.

### **Section III: PERMIT SHIELD**

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A.                      **40 CFR 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels)**

This regulation is not applicable to the Petroleum Storage Tanks ( TANKS) because The 42,000 gallon fuel oil tank is not subject to NSPS, Subpart Kb, constructed prior to the applicable date of July 23, 1984. The other four tanks are not subject to NSPS, Subpart Kb, each tank is below the tank size threshold of 10,566 gallons..

### **Section IV: ACID RAIN PROVISIONS.**

- IV.A.                      This source is not subject to Title IV. This section is not applicable.

## REVIEWER COMMENTS

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This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-574-01      dated July 27, 2001

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**1:      Comment on an item originating in 40 cfr 60.110b(a), Subpart Kb regarding Petroleum Storage Tanks (Unit TANKS):**

Petroleum storage tanks not subject to NSPS Subpart Kb: The 42,000 gallon fuel oil tank is not subject to NSPS, Subpart Kb due to being constructed prior to the applicable date of July 23, 1984. The other four tanks are not subject to NSPS, Subpart Kb due to each tank being below the tank size threshold of 10,566 gallons. [Comment last updated on 7/10/2000]

**2:      Comment on an item originating in DAQE-574-01 regarding 10 Percent Opacity Units (Unit Opacity-10):**

Opacity observation locations: The opacity surveys shall be conducted from pre-determined observation points. Currently, survey point A is located at the upper end of the quarry road, survey point B is located between bins 5 and 6, and survey point C used to survey haul roads shall be randomly selected based on the activities taking place at the time of the survey. [Comment last updated on 12/13/2000]

**3:      Comment on an item originating in DAQE-574-01 regarding 20 Percent Opacity Units (Unit Opacity-20):**

Opacity observation locations: The opacity surveys shall be conducted from pre-determined observation points. Currently, survey point A is located at the upper end of the quarry road, survey point B is located between bins 5 and 6, and survey point C used to survey haul roads shall be randomly selected based on the activities taking place at the time of the survey. [Comment last updated on 12/13/2000]

**4:      Comment on an item originating in DAQE-574-01 regarding 40 Percent Opacity Units (Unit Opacity-40):**

Opacity observation locations: The opacity surveys shall be conducted from pre-determined observation points. Currently, survey point A is located at the upper end of the quarry road, survey point B is located between bins 5 and 6, and survey point C used to survey haul roads shall be randomly selected based on the activities taking place at the time of the survey. [Comment last updated on 12/13/2000]

**5: Comment on an item originating in DAQE-574-01, Condition #20 regarding Rotary Kiln (Unit 20-1, DS1RK):**

AO condition satisfied by unit description: DAQE-574-01, Condition 20 states that the kiln shall burn only natural gas, fuel oil, plant-generated on-specification used oil fuel, and tire derived fuel (TDF). The AO contains limits or monitoring parameters only for the used oil fuel which are covered under other conditions. Any other fuel burned in the kiln would require a new AO. The unit description for the kiln contains the language that only the four fuels listed above shall be burned, and therefore an individual limit within the permit is not necessary. [Comment last updated on 9/18/2001]